

MAR 9 2006

510(k) SUMMARY

Hitachi's PROBEAT

K053280

**Submitter's Name, Address, Telephone Number, Contact Person
and Date Prepared**

Hitachi, Ltd., Power Systems Group
Advanced Medical Technology and Solutions Division, Proton Therapy
18-13, Sotokanda 1-chome, chiyoda-ku
Tokyo, 101-8608
Japan

Phone: 011-81-3-4564-3565
Facsimile: 011-81-3-4564-2882

Contact Person: Naoya Nishimura

Date Prepared: November 21, 2005

Name of Device and Name/Address of Sponsor:

PROBEAT

Hitachi, Ltd., Power Systems Group
Advanced Medical Technology and Solutions Division, Proton Therapy
18-13, Sotokanda 1-chome, chiyoda-ku
Tokyo, 101-8608
Japan

Common or Usual Name

Proton Beam Therapy System ("PBTS")

Classification Name

Medical Charged-Particle Radiation Therapy System

HI3360

Predicate Devices

K053280

- 1) Optivus Technology, Inc.'s Proton Beam Therapy System (K992414)
- 2) Ion Beam Applications S.A.'s, Proton Therapy System (K983024)

Intended Use / Indications for Use

The PROBEAT is a medical device designed to produce and deliver a proton beam for the treatment of patients with localized tumors and other conditions susceptible to treatment by radiation.

Technological Characteristics

The PROBEAT is a proton beam irradiation system, which provides a therapeutic proton beam for clinical treatment. It is designed to deliver a proton beam with the prescribed dose and dose distribution to the prescribed patient treatment site. The equipment is comprised of two main components. One is a beam delivery system whose primary responsibility is to ensure that the above listed prescription parameters are properly delivered. The other is the equipment necessary to generate the proton beam and direct it to the beam delivery system.

Performance Data

The submission includes performance testing that Hitachi conducted to demonstrate that the device meets its performance specifications.

Substantial Equivalence

The PROBEAT is substantially equivalent to the Optivus Technology, Inc.'s Proton Beam Therapy System (K992414), and the Ion Beam Applications S.A.'s, Proton Therapy System (K983024). The PROBEAT has the same intended uses and similar indications, technological characteristics and principles of operation. The minor technological differences between the PROBEAT and its predicate devices raise no new issues of safety or effectiveness. Thus, the PROBEAT is substantially equivalent to its predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Hitachi, Ltd.,
% Mr. Jonathan S. Kahan
Hogan & Hartson L.L.P.
Columbia Square
555 Thirteenth Street, NW
WASHINGTON DC 20004-1109

MAR 9 - 2006

Re: K053280
Trade/Device Name: PROBEAT
Regulation Number: 21 CFR §892.5050
Regulation Name: Medical charged-particle radiation therapy system
Regulatory Class: II
Product Code: LHN
Dated: February 21, 2006
Received: February 21, 2006

Dear Mr. Kahan:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

| | | |
|-----------------|----------------------------------|--------------|
| 21 CFR 876.xxxx | (Gastroenterology/Renal/Urology) | 240-276-0115 |
| 21 CFR 884.xxxx | (Obstetrics/Gynecology) | 240-276-0115 |
| 21 CFR 892.xxxx | (Radiology) | 240-276-0120 |
| Other | | 240-276-0100 |

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Nancy C. Brogdon
Director, Division of Reproductive,
Abdominal, and Radiological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure

INDICATIONS FOR USE STATEMENT

510(k) NUMBER (IF KNOWN): K05 3280

Device Name: PROBEAT

Indications for Use: Hitachi's PROBEAT is a medical device designed to produce and deliver a proton beam for the treatment of patients with localized tumors and other conditions susceptible to treatment by radiation.

Prescription Use ✓
(Per 21 C.F.R. 801.109)

OR

Over-The-Counter Use X

(PLEASE DO NOT WRITE BELOW THIS LINE -- CONTINUE ON ANOTHER PAGE IF
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

David A. Segerson
(Division Sign-Off)

Division of Reproductive, Abdominal,
and Radiological Devices
510(k) Number K053280